on his property, and on that of some friends, the principle he now advocated, and with the most beneficial results. In the house he lived in he had destroyed six enormous cesspools. His procedure was thus: he sent to the Sewers office, as any other person might do, to ascertain if any improved depth of insertion of his house-drain could be obtained, and having found that he could give an increased depth, he had the whole depth of his premises made one uniform inclination. As the most easily procured material nearest to the form he wanted, some drain tiles were purchased, and bedded in cement; all the side drains into the principal one were made with curves, and so efficient was this small economical drain, that even large McAdamized stones were swept away by the action of a very small quantity of water concentrated in this approximation to the egg form. Stones would not have been removed by four times the quantity of water in the house-drains built under the direction of the Westminster Commission, because in them the water-force was weakened by diffusion, and the friction of a much increased area. Having thus demonstrated the value and economy of the narrow channel as a self-cleansing drain, he proceeded to remark on the statement by the chairman, that there were two great obstacles to be considered, the tidal waters closing the outlets, and the upland waters coming down during these periods. These were imaginary difficulties. Nearly every outlet of the sewers in the Westminster Commission, from Temple-bar westward to Whitehall, discharged its waters at all times of the tide, and it was even doubtful whether or no, so high westward as the Causeway, at Whitehall Stairs, the sewers were flapped or not. The main Ranelagh sewer, and also the Counter's Creek Sewer, discharged at all times.

The surveyor, Mr. Dowley, was appealed to by the Court to ascertain if these statements by Mr. Leslie were correct, and he at once confirmed their accuracy.

Mr. Leslie proceeded to inform the court that originally the Regent's-park-tunnel sewer, under the jurisdiction of the Commissioners of Woods and Forests, was trapped at its outlet into the Thames, and great damage was thereby occasioned to the inhabitants in the neighbourhood of Charing-cross; but subsequently the orifice was left open, and the house-drains were trapped instead of the main channel, whereby the inconvenience was removed. That as to the egg form of sewer, with the narrow end downward,* in addition to the six eminent building firms who had approved of the lithographed sections exhibited last week, he was now authorised by Major-General Pasley, whom he had consulted on the subject, to declare his approbation of those sections; and he had received an additional testimony since he came into court. This he would read: it was as follows:—

"Dock-yard, Portsmouth, Oct. 23.

SIR,—At your request I have examined the forms of sewers submitted in a drawing signed "John Phillips," which I inclose, and I am of opinion that they are in every way better adapted for their purpose than the old form of sewer with a flat invert and upright sides; they are cheaper in construction, stronger in form, less liable to choke, as the current is concentrated upon a small area, instead of being spread over the invert: in fact, as regards form, they are the best I have seen.—I am, Sir, your obedient servant,

W. DENISON, Captain Royal Engineers."

Mr. Leslie then proceeded to state that he had another document to lay before the Court, namely, a letter, received also since he came into the room, from Mr. Roe, of the Holborn and Finsbury Commission, the chief introducer of the modern improvements in sewers. Having been requested by an influential commissioner to go to King's-road, Gray's-inn-lane, to witness the tumbled-down egg-form of sewer that had created such a chasm in the street, he thought it would be as well to hear Mr. Roe's version of the story, and at the same time elicit his opinion as to the lithographed sections by John Phillips. The following communication, which he read, was the result:—

"October 24th, 1845.

DEAR SIR,—In the hurry of business yesterday, I forgot to answer your remark on King's-road, Gray's-inn-lane: there has been no fall of any sewer or part of sewer of the egg shape (or any other shape). The cause of the remark may have arisen from a slip of earth, caused by the running out of sand at the bottom of the trench, but this was before any brick-work was put in.

Mr. Phillips' form of sewer is such a one as I submitted, together with the egg shape, to our court some years since, when the commissioners chose the latter for general use, for reasons they then assigned; but some thousand feet of the form Mr. Phillips advocates have been built in these divisions.

At Southampton, I have encouraged, and the commissioners are now building and are about to build several miles of sewer, whose form presents less amount of friction to a small body of water, than even the form named by Mr. Phillips.

I am pleased to see the manliness with which Mr. Phillips comes forward to corroborate facts, which the mere naming of caused heretofore such a hurricane.—I am, dear Sir, yours truly,

JOHN ROE."

The speaker then read to the Court some extracts from the annual report of 1845 to the Holborn and Finsbury Commissioners by Mr. Roe, from which it appeared that the adoption of the improved forms of sewer, including the periodical washing out of sixty-one miles of sewers by the flushing apparatus, have effected immense advantages with a total saving in three years of 22,461*l.* to the rate-payers of those divisions. He considered that within the last four years alone, the loss to the public by the bad form of sewers under the Westminster Commission amounted to between 70,000*l.* and 80,000*l.*, money worse than uselessly thrown away; while the forms he advocated would, at a very moderate calculation, effect a saving of between 20,000*l.* and 30,000*l.* per annum.

He concluded, by moving that the egg form of sewer, with the narrow end downwards, be the general form of sewer to be adopted by this commission for the public and private sewers, to be built within the jurisdiction of the Westminster Commission.

The Hon. Frederick Byng rose to second the motion, and stated that he considered Mr. Leslie had so exhausted the subject, that it would only be a repetition of the statements already made were he to occupy much of their time in the discussion; the motion had his most hearty concurrence. He could not sit down, however, without reminding the Court, of his previous objections to the unlimited power over the proceedings of the Court which the appointment of an annual chairman gave to an individual commissioner; and the court had before them another proof of that fact, inasmuch as the very able plans of Mr. Phillips, their clerk of the works, had been received by the chairman and returned to that officer: and but for the exertions of Mr. Leslie, the Court probably would not have had them at this moment on their table.

Mr. Allason objected to the motion, and said, that if carried it would only be affirming a general principle. What a situation was the Court placed in, that they could not rely on the advice of their own surveyors, but must have the opinions of six builders, together with General Pasley, Captain Denison, and Mr. Roe. He was satisfied that there must be different forms of sewers for different localities. He would ask the honourable mover of this question, would he build a sewer in the egg form if the sewer was required to be of the capacity of 10 feet by 10 feet? He should oppose the motion.

Mr. Hawkes followed on the same side. He said he had not heard a single argument in favour of the egg-shape sewer with the narrow end down; it would only obstruct the water, and overflow the houses. He considered that his friend Mr. Allason had given the knock-down argument to the egg shape sewer with the narrow end down, and would oppose the motion.

Mr. Mayhew said, notwithstanding the mover had so frequently been severe upon the professional commissioners, he, as one of them, would on this occasion most cordially support his motion. It was impossible to have a better form for rapidly removing the soil and cleansing itself; he would cheerfully support the motion.

Mr. William Donaldson would oppose the motion, being firm in the belief that the upright sided sewer with inverted bottom and arched top was the best form that could be adopted; he thought the matter should be delayed until the Court heard a report from their surveyors.

Mr. Cumberlege, as a professional member of the Court, would support Mr. Leslie's motion; the Court had been for thirty-six years using a most extravagant form of sewer, with a broad base downwards; and he hoped the period was now arrived when the principles of common sense would guide them.

The division was then called for; the motion was declared to be carried by 16 to 5. For the motion, Honourable F. Byng; Messrs. Baylis, Branscombe, Cumberlege, Fitch, Fuller, J. Gunter, R. Gunter, Hall, Harvey, Le Breton, Leslie, Marriott, Mayhew, Moss, and Wood; against it, Messrs. Allason, Wm. Donaldson, Gutch, Hawkes, and Kendall.

Mr. Leslie then rose, and expressed a hope that the Court would not be like the cow which had given a good pail of milk, and then kicked it over; he trusted they would concur in the motion he had now to propose:—"That the forms for general purposes, as in the annexed lithographed sections, by John Phillips, second clerk of the works, be adopted by this commission." This was seconded by Mr. Cumberlege, and carried *nem. con.* The Court then adjourned to Friday, the 31st of October.

We congratulate the public on the result of this meeting with much earnestness, being satisfied of the great advantages that will be gained by the change. Moreover, we cannot avoid taking to ourselves some little credit for our share in effecting it. We have received an able, but somewhat intemperate communication, from one who signs himself a commissioner, reprehending us for our advocacy of the views of a particular member of the Court, and at the same time praising the tone of the remarks in our last number, which, although ostensibly not published till Saturday, was in the hands of the commissioners, previous to the discussion above reported. We beg leave to assure the worthy writer (and worthy he evidently is, notwithstanding his spleen) that we pay no regard to persons in matters such as this. We owe a duty to the public which we will perform to the best of our ability, and will advocate what we consider wise measures, and assist in obtaining necessary reforms, without reference to the party proposing them.

FURTHER REMARKS ON THE ORIGIN AND USE OF PISCINÆ.

THE present vagueness of our terms, "relative to Gothic architecture and ecclesiology," must have presented itself to every one, who has attended to the study of antiquities. It leaves us in difficulty as to the meaning of many old authors, in whose works we find the greatest want of precise phraseology. The importance of a good nomenclature is in no respect so evident as in the science of chemistry, which has made rapid strides, probably due mainly to the better knowledge of its previous facts, which the infusion of a correct and expressive system induced. As we have before said, it is the more systematic study of Gothic architecture in this day, over that which has passed by, which has led to the present comparatively accurate knowledge of principles and facts. But the difficulty of applying a new nomenclature to a science which deals entirely with the past, is great, and would indeed tend to restrict that investigation of old authorities, on which much of our present knowledge must be based. All we can hope to do will be carefully to analyze, and arrange in tabular form, the several appellations, in order that it may at once be seen which are synonymous, or in what different senses each word is to be understood.

In no particular is this difficulty more evident, than in the various names attached to the piscina and the font, and it would be well should every writer who attempts to unravel such an intricate matter, have the advantage of the supervision of so able a commentator as Dr. Bromet.* The "piscina at Haddenham"† was so styled after some consideration. It was thought that it could not have been an aumbry, because it does not occupy the place where that receptacle is *usually* found, and because there are no hinges, nor any signs of

* As first published in THE BUILDER.

* Vide *ante* p. 469.
† Illustrated, *ante*, p. 472.

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